



U.S. DEPARTMENT OF
ENERGY

Presentation to the DOE HLW Corporate Board

Tank Closure

**Sherri Ross
Waste Removal and Tank Closure
Waste Disposition Project
Programs Division
Savannah River Operations Office**



Topics

- **Overview and Status of SRS Tank Closure Program**
- **Issues/Challenges**
 - **Communications**
 - **Schedule Performance**
 - **Ceasing Waste Removal**
 - **Compliance with SC Water Protection Standards**
- **Questions?**

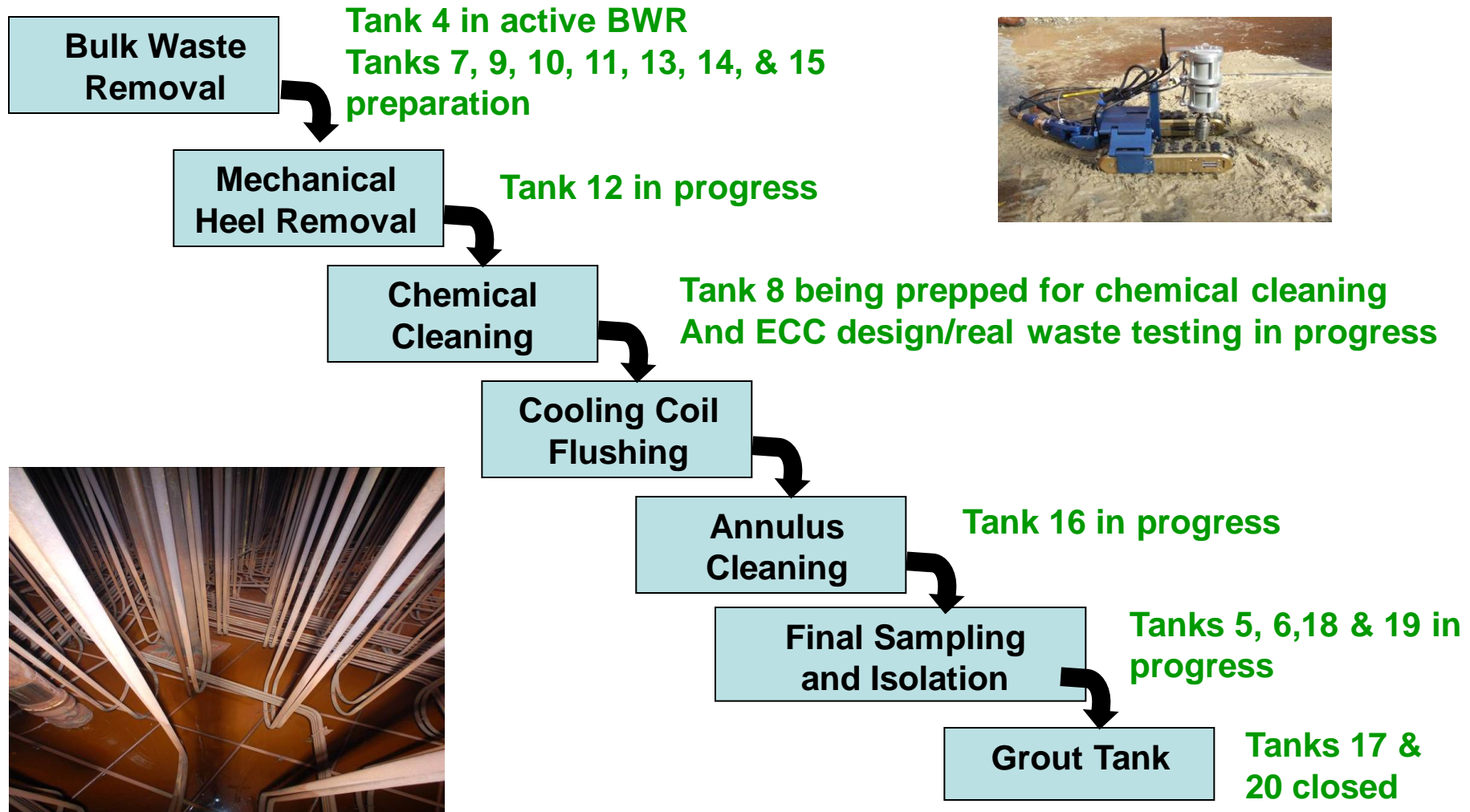


Overview of SRS Tank Closure Program

- **Two Tank Farms – F Area and H Area**
- **Permitted by SC as Industrial Wastewater Facilities under the Pollution Control Act**
- **Three agency Federal Facility Agreement (FFA)**
 - **DOE, SCDHEC, and EPA**
- **51 Tanks**
 - **24 old style tanks (Types I, II and IV)**
 - **Do not have full secondary containment**
 - **FFA commitments to close by 2022**
 - **2 closed in 1997**
 - **27 new style tanks (Type III/IIIA)**
 - **Full secondary containment**
 - **No enforceable closure commitment dates**
- **Following operational closure, Final RCRA/CERCLA closures will occur under the FFA**



Tank Closure Progression and Status

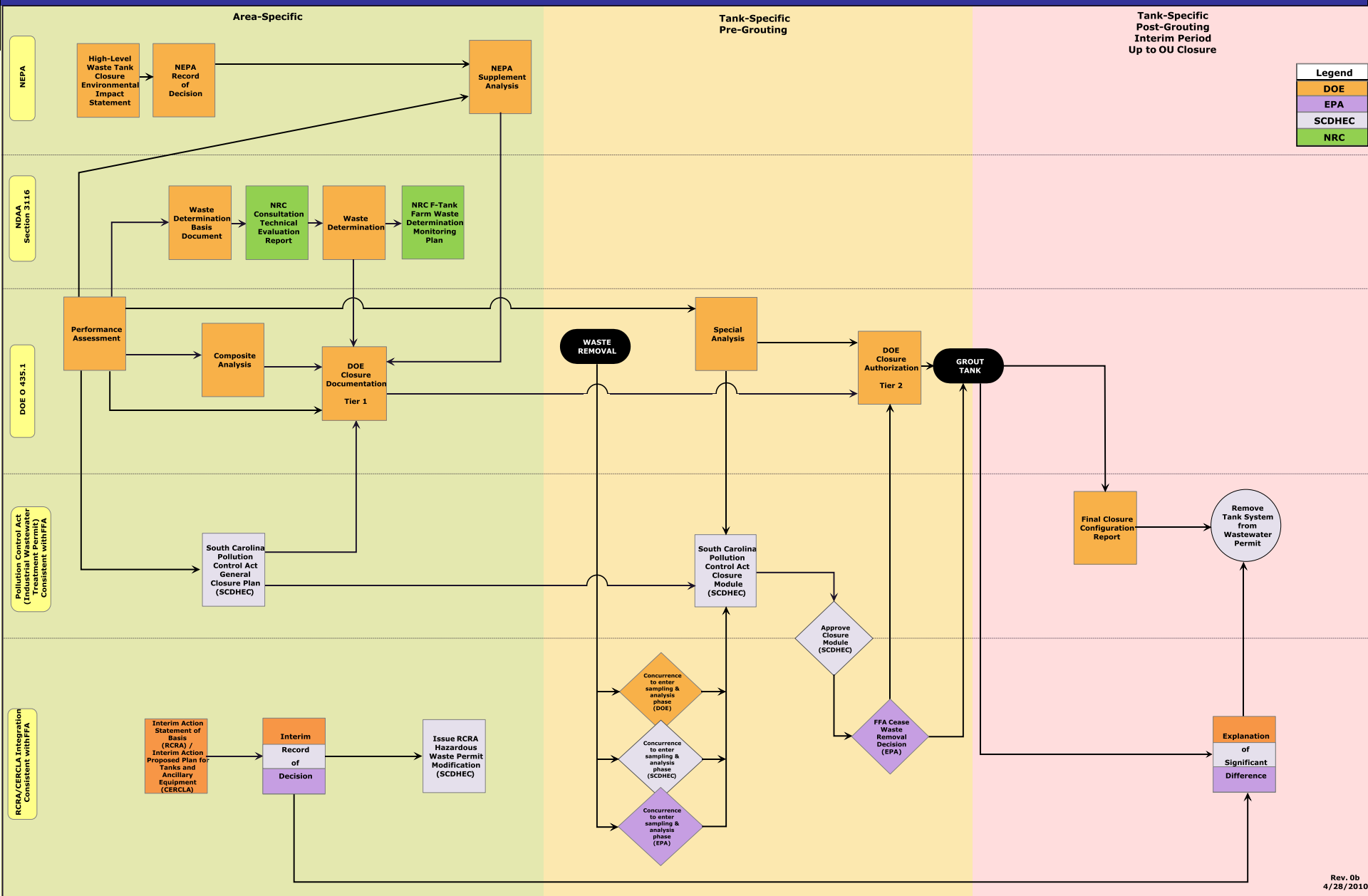


Issue/Challenge: Communications

- **Closure of tanks requires multiple agency involvement (Contractors, DOE, NRC, SCDHEC, EPA, Public)**
- **Communication techniques and initiatives:**
 - **Generic and specific technical discussions**
 - **Scoping meetings in advance of work product**
 - **Regularly scheduled meetings and calls**
 - **Minimize travel by using conference calls, Webcast, etc**
 - **Joint Agency public presentations**
- **Openly discuss schedule, expectations, needs, upcoming activities regularly**
- **Establishing and maintaining adequate communications is extremely important and challenging**

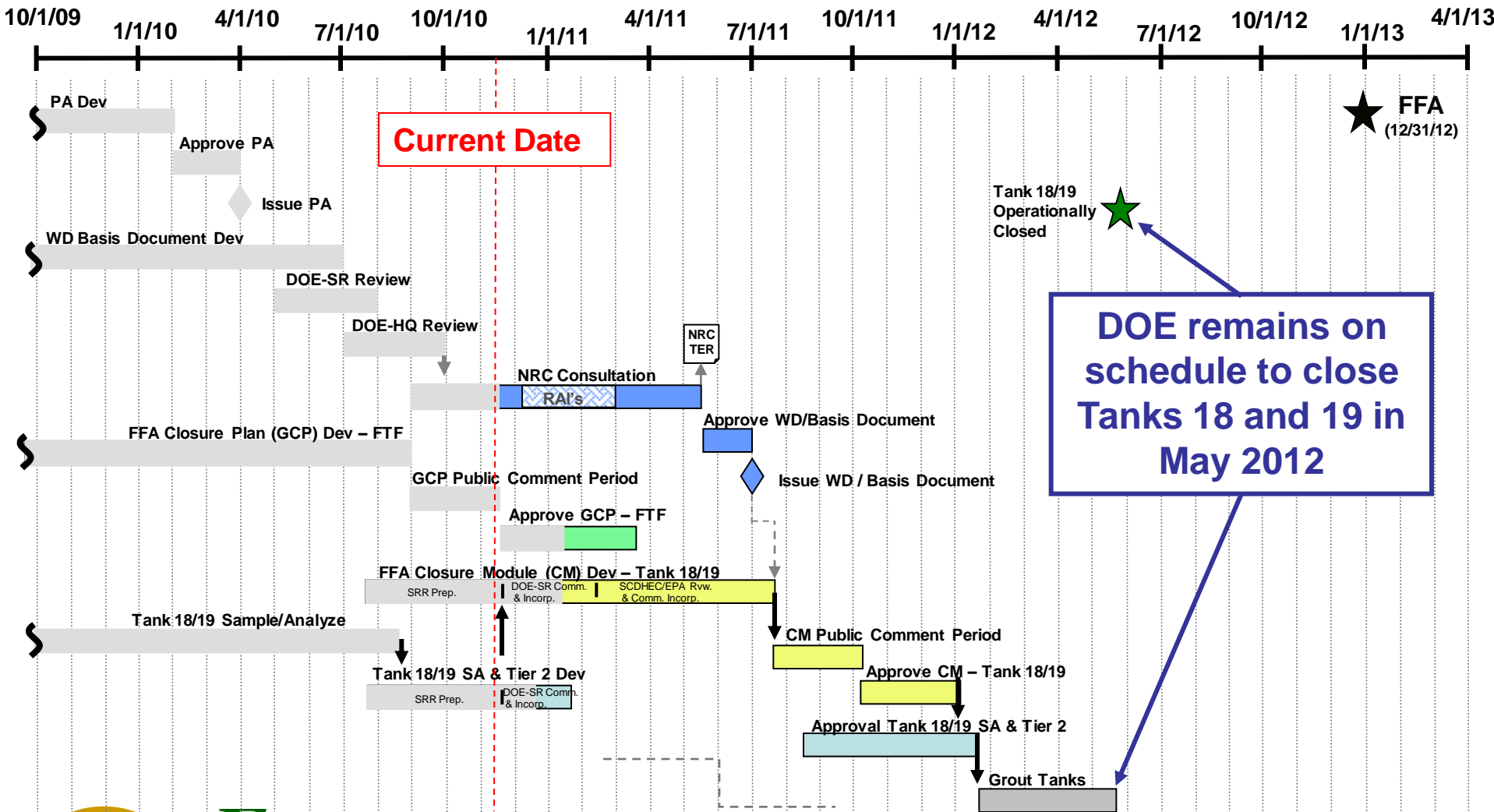


Regulatory Documentation Path for Closure



Issue/Challenge: Schedule Performance

Closure of Tanks 18 & 19

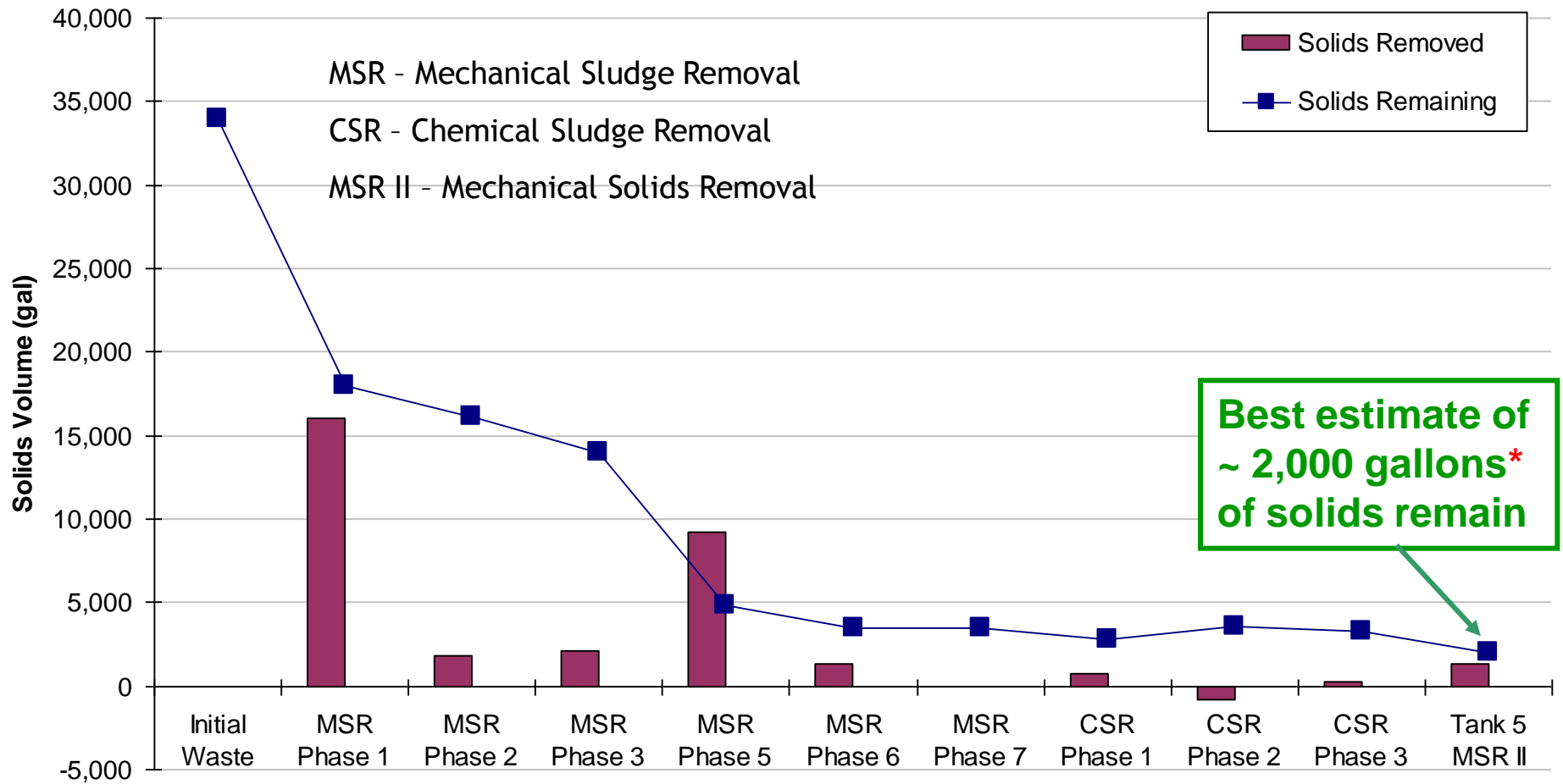


Issue/Challenge: Ceasing Waste Removal

- **Federal Facility Agreement – “DOE, SCDHEC, and EPA shall mutually agree that waste removal activities may cease.”**
- **Agencies agreed to a two part decision:**
 - **Early, non-binding decision based on qualitative evaluation**
 - **DOE present justification to SCDHEC and EPA followed by DOE written request and SCDHEC/EPA written concurrence**
 - **Concurrence for Tank 18, 19, 5 and 6 achieved in the last year**
 - **Final decision based on full quantitative evaluation in tank specific closure plans**
- **Basis:**
 - **Justify the selected technologies**
 - **Explain how waste removal was performed and why**
 - **Demonstrate diminished removal efficiency**
 - **Impacts of continued waste removal**
 - **Evaluate additional waste removal (worker dose, cost, schedule, system impacts, and potential additional risk reduction)**
 - **Visual aides**



Tank 5 Heel Removal History



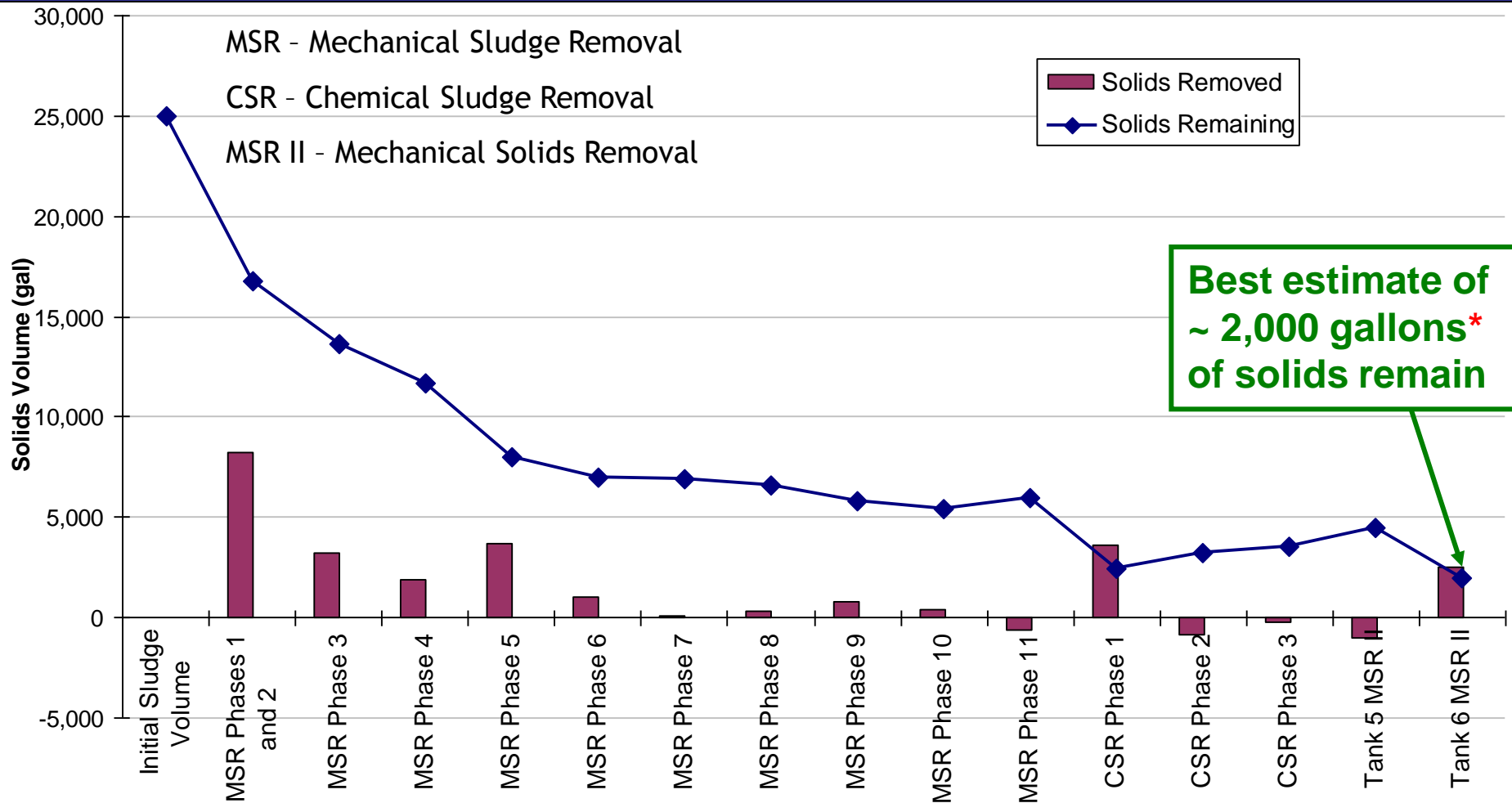
* Based on a qualitative estimate of the remaining solids. Final volume determination will be included in the Closure Module.



Tank 5



Tank 6 Heel Removal History



* Based on a qualitative estimate of the remaining solids. Final volume determination will be included in the Closure Module.



Tank 6



Current Status of Tanks

	Tank 5	Tank 6	Total
Total Starting Volume (gal)	730,000	730,000	1,460,000
Total SMP Run Time (hr)	2,466	5,818	8,284
Total Liquid Introduced into the Tank (gal)	2,960,000	3,800,000	6,760,000
Total New Waste Created (gal)	780,000	500,000	1,280,000
Total Solids Removed (gal)	32,000	23,000	55,000
Total Solids Remaining* (gal)	2,000	2,000	4,000
Percent of Total Volume Removed (%)	99.7	99.7	99.7

* Based on a qualitative estimate of the remaining solids. Final volume determination will be included in the Closure Module.



Issue/Challenge: Compliance with SC Water Protection Standards

- **Tanks 17 and 20 point of compliance was seep lines of two streams ~ 1 mile from F Tank Farm boundary**
- **SCDHEC now requiring all aquifers, even under the tanks comply:**
 - **4 mrem/yr dose from beta gamma contaminates**
 - **15 pCi/L alpha concentration**
 - **Specified chemical maximum concentration limits**
- **Demonstration of compliance will be through groundwater monitoring**
 - **SCDHEC and EPA have requested approval of a new Groundwater Monitoring Plan**
 - **Under development ~ Spring 2011**
- **F Tank Farm Performance Assessment does not predict MCLs will be met under the tank farm for all aquifers**
 - **Does predict compliance at 100 meters from tanks**
- **Strategy is to monitor at perimeter of closure cap (~ 100 meters) and establish Interim RCRA/CERCLA Documents with regulators to limit land use to industrial purposes and prohibit drinking of groundwater.**



Questions?



Back-up Slides



Tank Closure Schedule

